

The OSCILLATOR

**Volume 28 Issue 4
April 2005**

**Oregon Tualatin Valley
Amateur Radio Club**

Since 1978

The Oregon Tualatin Valley Amateur Radio Club is a special service club related to ARRL: The National Association for Amateur Radio. We seek to advance the Amateur Radio Service through:

- ⇒ Education and Training of new and licensed amateurs
- ⇒ Public Service and Emergency communication
- ⇒ Hobby nets, contests and meetings
- ⇒ Social events

Membership is available to anyone interested in amateur radio. A license is not required.

CLUB Meeting - Wednesday, April 13

We meet on the second Wednesday of each month at the Beaverton Elks' Club, 3500 SW 104th Ave, Beaverton. Our meetings open at 7:00 pm. Guests are welcome.

Amateur radio operators around us are involved in interesting projects and research. Our program this month features a presentation by the Portland State Aerospace Society.

Glenn LeBrasseur KJ7SU and Andrew Greenberg KD7CJT are project managers for the Society's rocket program. They will bring along items for "show and tell" and speak about communications systems and rockets in which they are involved. They promise launch videos from recent launches, from earth and from the rocket!

Bring young hams and prospects to this meeting.

KK7TN PARAGRAPHS Don Stettler KK7TN



Volunteers are what make the club go. The reality of this has become very apparent to me again.

Field Day and Sea-Pac are major events on the club's calendar. Last month I complained in PARAGRAPHS that we did not yet have a Field Day Coordinator. Gratefully, Verne Smith W7GRN and David Hart KD7ZFK have volunteered to take on that job. That is a big load off my mind. Verne and David can't do it by themselves, please offer your help. Field Day is Saturday and Sunday, June 25 - 26 this year.

Thanks to Julie Landers KD7GQW for faithfully tending the Lunch Bunch and Health and Welfare duties for several years. Her schedule does not permit her to continue. I appreciate Linda Sutton KC7YTD for agreeing to take on these duties. Linda has served the club in a variety of ways and her return to these functions is appreciated.

Volunteers come in a variety of kinds. Some do long-term assignments...others take on critical but short-term projects. They are all important to the success of our club.

73

Don KK7TN

CLUB INFORMATION

Amateur Radio Exam Sessions

Volunteer Examiners, members of OTVARC, provide at least six exam sessions each year. Sessions are under the direction of Carl Clawson WS7L.

This year, exams are Saturdays:

- April 2 • June 18 (SEA-PAC)
- August 6 • October 1
- December 3

Regular sessions are 1:00 pm at Ronler Acres Fire Station across from Hillsboro Stadium on Evergreen Parkway. The SEA-PAC session is 9:00 am at Our Saviour's Lutheran Church, across from the Convention Center.

Pre-register for the exams by contacting Carl, WS7L, at ws7l@arrl.net or by phone at 503.629.5796.

Happy April Birthday

- 4 W7GU Kenneth Moore
- 6 WA6TV Richard Christie
- 12 KB7PVW Mel Sutton
- 16 KB7VFR Eric Patterson
- 18 K7WWG Wes Allen
- 21 K7VLS Rick Rasch
- 24 K7EJ Ernest Johnson
- 25 KE7CIE J. Michael Fuller
- 26 N7WAL Sally Butterfield
- 27 KD7EFM Jeff Repp

Updates and corrections to w6abm@arrl.net

HAMFests

2 April 2005

Communications Academy 2005
<http://www.commacademy.org>
 Seattle, WA 98103-1134
 Bruce Miller, KC7IAY
 Phone: 206-524-6567
radiorange@kc7iay.com

16 April 2005

Yakima Hamfest
<http://eagle.ykm.com/~W7aq/>
 11808 Bristol Ct.
 Yakima, WA 98908
 Ken Kester, K7IJB
 Phone: 509-965-5967
 Email: k7ijb@arrl.net

17 - 19 June 2005

SEA-PAC '05

Seaside, Oregon
<http://www.seapac.org>
 Box 25466
 Portland OR 97298-0466
 Will Sheffield N7THL
n7thl@arrl.net

TRAVELERS'

The TRAVELERS' seek out interesting places to camp during the year. You do not have to be the owner of an RV to participate. Next event: May 2005.

For information about The Travelers' contact Betty Mickley N7REX by email at n7rex@teleport.com or at 503.642.1284.



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PROJECT FUNDING UPDATE

Your contributions of \$262.00 to the Repeater Maintenance Fund and \$549.00 to the Scholarship Fund make possible these OTVARC activities in 2005. If you have not contributed to these important club projects, its not too late. Your contribution should be given to Alvin Carlson, KB7VHI, our treasurer.

We have given the Mickley Memorial Scholarship (\$1,000.00) to an amateur in College for several years. Funds for the award previously came from SEA-PAC proceeds. Your board has asked Everett Curry W6ABM to head fund-raising to secure the needed funds in 2005.

We spent more than \$ 1,350.00 for repeater sites and maintenance in 2004. Wes Allen K7WWG is working to "convert" some of our spares to dollars for the Repeater Fund. We have a full 2 meter repeater in "stand-by" mode. Wes expects to take a survey trip to the Goat Mountain site in May.

Public Service Events

Rose Festival/Life Works Duathalon
Sunday, May 22, 2005

Twelve hams needed...call:

Alan Chinnock KB7POR

503-636-2237 or kb7por@aol.com

Jim Schaeffer KB7ADH at 503-245-2518

DC POWER

We know how to make connections

Wes Allen, K7WWG President
665 SW 167th Ave. 503-531-4081
Beaverton, Oregon 97006

LUNCH BUNCH

Join other members for BREAKFAST on

Sunday April 17th
8:30 am

Sunday Breakfast
at

Old Country Buffet
3790 SW Hall Blvd
Beaverton

Just down from Cedar Hills Crossing

Questions?

Linda Sutton KC7YTD

kb7pww@arrl.net or 503.246.8879



WWW.ARRL.ORG

Since its modest beginnings in 1933, ARRL Field Day has grown into a premier operating event for thousands of radio amateurs. Field Day places a premium on developing skills to meet the challenges of emergency

preparedness as well acquainting the general public with the capabilities of Amateur Radio. For many radio clubs, Field Day stations are operated in less than optimal conditions--setup in camp-like fashion. Others operate free of commercial power, using only generators, solar energy or other alternate power sources.

Entry categories encourage participation from individual hams operating from their home stations. Save June 25-26! It's fun for all!



NORTHWESTERN DIVISION CONVENTION

June 17, 18 & 19, 2005

Seaside Oregon

MEET OUR SPEAKERS

Glenn LeBrasseur KJ7SU is a member of the Portland State Aerospace Society [PSAS] communications team. He is currently a computer-engineering student at Portland State University [PSU].

Glenn works for an environmental monitoring group at the City of Portland doing embedded computer programming and communications design. He is an Advanced Class amateur radio licensee interested in antennas and digital communications. He is a member of ARRL and AMSAT.

Andrew Greenberg KD7CJT is a project manager for PSAS and is currently working on his masters degree in electrical engineering from PSU. He runs the research and development office of a small medical software company, and has been an active Technician Class licensee since 1998.

WEATHER SPOTTER TRAINING

Have you wanted to be better prepared to "read" the weather in emergency situations. NOAA provides free training for weather spotters. Classes are being offered in April and May in our area. You have two choices:

Thursday, April 7th at 7:00 pm in the Dallas Fire Department Training Room, 915 SE Shelton, Dallas, OR or **Tuesday, April 12th** at 7:00 pm at NW Regional Training Center, Baker Room 11606 NE 66th, Ste 103 Vancouver, WA.

For information and maps, go to:
www.wrh.noaa.gov/pqr/info/pdf/spotmar05_2.pdf

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ARUNI (from Page 5)

These are good manners and disciplines that are even useful to our daily life. We also learn to keep records of all the satellite contacts we make to exchange official "QSL cards" to confirm our contacts. These records includes all necessary details about these contacts including date, time, station call signs, grid locations, frequencies, equipment, antennas etc. These records can be used to apply for various satellite communication awards. Recently I won my first such award of "Oscar Satellite Communication Achievement Award" for the satellite contacts I made through 20 individual US states including 3 Canadian provinces. This is one of the things we earn from Amateur Satellite operations that we can be proud of when we grow up.

Since I started keeping records of my satellite contacts, I also started maintaining a record about the history of my daily activities before I go to bed. This is a good example of a great habit, which I learned from being a Radio Amateur. I hope many more kids join with this exciting hobby, benefit from the experience, which will help to build their future successfully.

Hear you on the "birds" soon!

73, Aruni

Satellite Beacon:

Kids and Amateur Satellites, Aruni Kumari Perera VE4WMK

[Ed. Note: At age 11, Aruni is the youngest member of the Project OSCAR team. She lives in Winnipeg, Manitoba, Canada and attends the 6th grade. Her Dad, Kumara Perera VE4WKP is a Project OSCAR member and active on Amateur Satellites.]

Amateur radio is a wonderful hobby with no age limit. It is not only a “fun” hobby but also a hobby with great benefits for our school studies such as science, math and social studies, as well as for our day-to-day life. Amateur satellite communication is the most fascinating and technically challenging part of this hobby in the modern world.

What are these Amateur Satellites or “birds” (the pet name for Amateur satellites)? What we can learn from this as school children if we become young Amateur satellite operators?

Understanding the basics of Amateur satellites is very beneficial for us as school children. Amateur satellites are built on the ground by Radio Amateurs and sent into space around the earth by powerful rockets. They carry transmitters and receivers to communicate with Radio Amateurs on the ground helping them to exchange radio contacts from long distances covering large ground areas. Their paths or “orbits” around the earth are about 400 Km to 2000 Km high above the earth. They travel on these “orbits” at a speed of about 28,500 Km per hour. Such speed keeps satellites from falling back to earth due to gravity. This is a very important principle of physics in science we learn in our later grades.

We learn how to send radio signals to these moving satellites by tracking or following their paths accurately while they travel above our ground stations. There are computer “satellite tracking programs” to help predict these paths for us. We can learn some interesting geographical terms such as Horizon, Azimuth, Elevation, Latitude, Longitude.

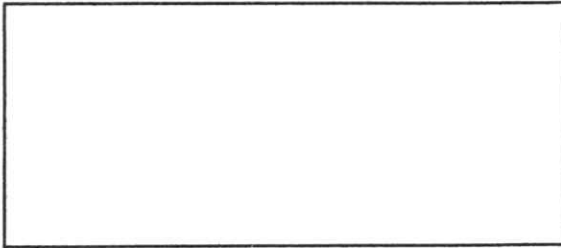
which are related to these computer programs. We also learn about the earth's time zones when we learn how to convert our local time to the Universal time UTC (Universal Time Coordinate).

To know the exact angle the satellite entering from our “Horizon”, we must learn how to measure various angles. We learn how the “Compass” works and how to find the “Azimuth” or the geographical angle of the satellite’s path using the Compass. Elevation is also an angle we should understand to locate these “birds”. These are good homework for our math studies.

We satellite operators, exchange contacts through these satellites using base stations, mobile stations with equipment mounted in cars or even like myself operate with inexpensive portable transceivers and handheld antennas. When we use our radio equipment and portable antennas for satellite communication, we learn the basics of modern communication equipment and radio transmission principles. It's a great opportunity for us to learn how to program the various functions such as transmit and receive frequencies, tones, transmit power levels etc in modern transceivers. We also learn how to care about our basic electronic equipment and how to maintain their rechargeable batteries.

As satellite operators, we follow certain routines in order to share this fun with other operators. Since these satellites travel above our stations only for about 15 minutes, we learn to be patient to make a contact with a station in order not to interfere with on going communications. We also learn to follow the "Golden rule" - not to send transmissions to the satellite until we hear other stations. This is to make sure our receiving setup is working properly before we transmit. *See ARUNI Page 4*

CLUB MEETING APRIL 13TH



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AMATEUR RADIO AND THE ROSE FESTIVAL DUATHALON

Amateur radio has been asked to help with the Rose Festival/Life Works Duathlon this year. The event will be Sunday, May 22, 2005. It consists of a 5K run, a 25K bike ride, and a 5K run. We will be working with Hamilton Events.

The start and end will be Waterfront Park. The amateur radio portion will be the bike ride which goes from Waterfront Park to the St. Johns Bridge and back. More information on the event can be found at www.rosefestival.org/duathlon.

We will need twelve hams for the job. We'll start at about 6 am and be done around 11 am. Since this is the first year for this event we are still working on the details.

Due to my continuing education it looks like I will not make the OTVARC meetings between now and the event so I will need to handle this over the web and by phone. Anyone interested can contact me at 503-636-2237 or kb7por@aol.com. You may also contact Jim Schaeffer KB7ADH at 503-245-2518.